ABSTRACT OF THE DISCLOSURE

A code-modulation adaptive and variable multiplexing transmission apparatus. Dividing circuit divides transmission information data into plural transmission sub-channel signals. Coder performs error-correction coding by coding scheme and coding ratio selected from plural schemes and plural ratios for each sub-channel. Modulator performs primary modulation by selecting a multi-level modulation scheme from plural schemes for each sub-channel. Another modulator performs band-broadening by selecting a band-broadening scheme from plural schemes for each sub-channel. Adding circuit adds transmission-condition identifying information including coding scheme and coding ratio, multi-level modulation scheme in the primary modulation, band-broadening scheme in the secondary modulation on each sub-channel, and the number of the sub-channels. Multiplexing circuit frequency-multiplexes plural modulated outputs, so that they are frequency-multiplexed and transmitted.